Amendments to the Claims:

1. (previously amended) A method of forming a doped A site deficient manganate material on a substrate from corresponding precursor(s), comprising liquid delivery and flash vaporization thereof to yield a precursor vapor, transporting the precursor vapor to a chemical vapor deposition reactor for chemical vapor deposition formation of the manganate material on the substrate, said manganate material having, a formula of $La_xM_yMnO_3$, where M = Mg, Ca, Sr, or Ba, a Curie temperature that is between 273 K and 334 K and $0.5 < (x+y) < 0.9$.

2. (previously amended) The method according to claim 1, wherein the precursor(s) comprise coordination compounds, or Lewis base complexes of metal(s) selected from the group consisting of lanthanum, magnesium, calcium, strontium, barium, and manganese.

3. (previously amended) The method according to claim 1, wherein the precursor(s) include metal ß-diketonate compounds, metal pivalate compounds, or Lewis base complexes thereof.

4. (previously amended) The method according to claim 1, wherein the precursor(s) include metal fluorinated ß-diketonate compounds, or Lewis base complexes thereof.

5. (previously amended) The method according to claim 1, wherein the precursor(s) include metal pivalate Lewis base adducts.

6. (previously cancelled)

7. (previously amended) The method according to claim 1, wherein the precursor(s) are dissolved in a solvent and flash vaporized at a temperature of from about 100 °C to about 300 °C.

8. (previously amended) The method according to claim 1, wherein the precursor vapor is transported to the chemical vapor deposition reactor in a carrier gas.

9. (previously amended) The method according to claim 8, wherein the carrier gas is selected from the group consisting of argon, nitrogen, neon, helium and ammonia.

10. (previously amended) The method according to claim 8, wherein the carrier gas is mixed with an oxidizing co-reactant gas in the chemical vapor deposition reactor or prior to transport to the chemical vapor deposition reactor.

11. (previously amended) The method according to claim 1, wherein the chemical vapor deposition reactor contains a substrate article heated to a temperature in the range of from about 300 °C to about 1000 °C.

12. (previously amended) The method according to claim 11, wherein the pressure of the precursor vapor in the chemical vapor deposition reactor is from about 0.1 to about 760 Torr.

13. (previously amended) The method according to claim 1, wherein the chemical vapor deposition is plasma-assisted.

14. (previously amended) The method according to claim 1, wherein the precursor(s) comprise a mixture of ß-diketonate compounds selected from the group consisting of $La(thd)_3$, $Ca(thd)_2$ and $Mn(thd)_3$.

15. (previously amended) The method according to claim 1, wherein the precursor(s) comprise a mixture of ß-diketonate compounds selected from the group consisting of $La(thd)_3$, $Sr(thd)_2$ and $Mn(thd)_3$.

16. (previously amended) The method according to claim 14, wherein said precursor(s) comprise a mixture of Lewis base adducts of metal ß-diketonate precursors.

17. (previously amended) The method according to claim 1, wherein M is Ca and said manganate material has A-site deficient stoichiometry, where (La+Ca) < 0.9.

18. (previously cancelled)

19. (previously amended) The method according to claim 1, wherein M is Sr and said manganate material has A-site deficient stoichiometry, where (La + Sr) < 0.9.

20. (previously cancelled)

21. (previously amended) The method according to claim 1, wherein M is Ba and said manganate material has A-site deficient stoichiometry, where (La + Ba) < 0.9.

22.-27. (previously cancelled)

28. (currently amended, previously added) The method according to claim 1, wherein said manganate material is annealed in oxygen-14.

29. (previously added) The method according to claim 17, having a (La + Ca):Mn ratio that is between 0.6 and 0.9.

30. (previously added) The method according to claim 17, having a Ca/La ratio that is between 0.35 and 0.55.